

ABSTRACT

The invention provides a high-strength steel that has excellent ductile fracture values J integral even at low temperatures, so the risk of the component, which is produced in each case from the steel, breaking is reduced to a minimum even under unfavourable, hard operating conditions. This is achieved in that it contains (in % by weight) 0.08 to 0.25 % C, 0.10 to 0.30 % Si, 0.80 to 1.60 % Mn, = 0.020 % P, = 0.015 % S, the sum of the P and S content being = 0.030 %, 0.40 to 0.80 % Cr, 0.30 to 0.50 % Mo, 0.70 to 1.20 % Ni, 0.020 to 0.060 % Al, 0.007 to 0.018 % N, = 0.15 % V, = 0.07 % Nb, the sum of the V and Nb content being = 0.020 % and the remainder being iron and inevitable impurities. The steel according to the invention is particularly suitable for the manufacture of high-strength chains.

The diagram is intended for the publication of the Abstract.